



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/509,674

10/08/2004

Haruo Otake

040500

6118

23850

7590

07/10/2006

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

ASINOVSKY, OLGA

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/509,674

Applicant(s)

OTAKE ET AL.

Examiner

Olga Asinovsky

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/03/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

~~***Claim Rejections - 35 USC § 102***~~

0. A
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Akao et al U.S. Patent 6,022,924.

The claimed masterbatch pellet mixture can include any pellets derived from an organic and/or inorganic material. The term "specific gravity" is equivalent to a density.

Akao discloses a color masterbatch resin composition consisting of polystyrene resin and/or a polyolefin resin, an inorganic light-shielding material such as pigment in the form of powder, and a metal salt of a partially saponified fatty acid ester, column 2, lines 38-45. Pellets of the color masterbatch resin composition are mixed with pellets of a thermoplastic resin, column 3, lines 61-63; column 41, lines 41-42. The color masterbatch resin composition includes a light-shielding material such as an inorganic pigment that may be a carbon black having specific gravity of not less than 3.1, preferably not less than 3.4, column 17, lines 43-65; column 19, lines 31-35. Another inorganic light-shielding material having a specific gravity of 1.7 to 6 can be employed in addition to the carbon black, column 60, lines 32-33. The color masterbatch resin

Art Unit: 1711

having a light-shielding pigment having specific gravity of at least higher than 1.7 would inherently readable for pellets group (A) in the present claims. A thermoplastic resin includes various polyolefin resins or rubber-containing aromatic vinyl resin, column 41, lines 27-37. Polyolefin resin having a density in the range of 0.935 g/cm³, column 43, lines 56-65 is readable for being a thermoplastic resin pellet having low density= low specific gravity in the present claims for pellets group (B). Akao discloses a mixture of pellets having a high specific gravity and pellets having low specific gravity. Akao discloses a process for producing the color masterbatch resin composition pellets having specific length of 4 mm, a width of 4 mm and a height of 3 mm, column 51, lines 33-35, and mixing said pellets with a thermoplastic resin pellets having a diameter of 3 mm and a height of 4 mm, column 51, lines 37-39. Akao does not disclose the specified equation of a formula (1) in the present claim 1, however, all definitions of columnar masterbatch pellets having the high specific gravity of pellets for color masterbatch resin and all definitions of the pellets of thermoplastic resin having the low density in the working examples in Akao invention are within the scope of the characteristics of pellets in the present claims. In view of the similarity between the reference pellets mixture and the present claimed invention, the formula (1) in the present claim 1 is applied to the resulting pellets mixture comprising pellets having at least higher than 1.7 specific gravity and pellets having density of 0.935 in Akao invention, and the limitations of the result of the applied equation is inherently being within the limitations of said formula (1) in the present claims. The invention as claimed is anticipated by the disclosure in Akao invention.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References have been considered.

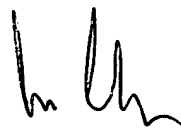
References in European Search Report are included in PTO FORM 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

O.A.



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700